ABSTRACT OF THE DISCLOSURE

Processes for precursors for silicon dielectric depositions of silicon nitride, silicon oxide and silicon oxynitride on a substrate using a hydrazinosilane of the formula:

$[R^{1}_{2}N-NH]_{n}Si(R^{2})_{4-n}$

where each R^1 is independently selected from alkyl groups of C_1 to C_6 ; each R^2 is independently selected from the group consisting of hydrogen, alkyl, vinyl, allyl, and phenyl; and n = 1-4. Some of the hydrazinosilanes are novel precursors.